

CLAIMS

I CLAIM AS MY INVENTION:

1. A turbine component tracking system, comprising:

5 a plurality of marked turbine components;

at least one turbine control system adapted to obtain operational data for the turbine components; and

a central processing station operatively connected to the at least one turbine control system and adapted to upload the operational data from the at least one turbine control system,

10 whereby desired turbine component specific information is determined and output by the central processing station for turbine component tracking purposes.

2. The system of claim 1, wherein the turbine components are marked with a bar code or a serial number.

3. The system of claim 1, wherein a plurality of indicia are used to mark the turbine components.

20 4. The system of claim 1, wherein the turbine control system is TXP control system.

5. The system of claim 1, wherein the turbine control system continuously updates the operational data for each turbine component.

6. The system of claim 1, wherein the central processing station is remotely located from the turbine control system.

7. The system of claim 1, wherein the central processing station receives the operational data via electronic uploads from the internet.

8. A method of tracking turbine components, comprising:
marking a plurality of turbine components;
placing the turbine components in a plurality of turbines;
operating the turbines;
obtaining operational data from the turbines via at least one turbine control system;
uploading the operation data from the turbine control systems to a central processing station; and
using the uploaded data at the central processing station to track desired aspects of the turbine components.

9. The method of claim 8, wherein the marking identifies a location where at least a portion of the turbine component was manufactured.

10. The method of claim 8, wherein the marking identifies a material composition from which at least a portion of the turbine component was manufactured.

11. The method of claim 8, wherein the marking identifies a manufacturing step from which at least a portion of the turbine component was manufactured.

12. The method of claim 8, wherein the marking identifies a repair procedure that at least a portion of the turbine component underwent.

5 13. The method of claim 8, wherein the operational data is selected from the group comprising equivalent base hours and equivalent starts.

14. The method of claim 8, wherein the operational data includes the turbine in which the turbine component is placed.

10 15. The method of claim 8, wherein the desired aspects of the turbine component includes the remaining life of the turbine component.

16. The method of claim 8, wherein the desired aspect of the turbine
15 component includes a description of the turbine component.

17. The method of claim 8, wherein the turbine is a land based combustion turbine engine.

20 18. The method of claim 17, wherein the turbine is part of a power plant than produces electricity.

19. The method of claim 8, wherein the statistical analysis is performed on the operational data to help estimate the cost of a repair operation.

25